D & D SUBGROUP HIGHLIGHTS
May 11, 1999

This meeting was held in the EESB Cayuse Room. The meeting began at 9:00 a.m.

Science and Technology Needs Updates

Greg Berlin reviewed the changes to the D&D needs from Fluor Daniel Hanford (FDH) and their subcontractors. The next step is to publish the draft report of all the subgroup's needs. They may make the needs document accessible to all on a shared drive. At the end of August the final hard copy report will be done and a CD-ROM will also be distributed of the updated Hanford needs.

Based on the discussion at the last D&D Subgroup meeting two WESF needs (RL-DD042 and 043) were examined further and found not to be needed. These two needs are being deleted from this year's list. The first (042) dealt with extending the life of windows on hot cells at WESF and given the fact that these hot cell windows will soon be deactivated it made no sense to keep this need. In addition, the second need (043) dealt with upgrading the crane system for the hot cell's canyon and pool area at WESF. The hot cells will be deactivated soon and it may not be safe to use a crane in the pool area.

Sue Garrett led a discussion of changes to the science needs. Science need, RL-DD023-S, entitled "Cesium Source Identification" was discussed. This science need is similar to the technology need, RL-DD01, entitled "Cesium/Strontium Capsule Leak Detection System for WESF". Both deal with water ingress into the capsules and ways to identify which capsule has been breached. The science need is written more vaguely so as not to presuppose a solution. It may be necessary to clarify the problem to help vendors and scientists meet our needs. Changes were then made to the science need and accepted by the subgroup. Strontium may be added to the science need scope next year. The need, RL-DD028-S, entitled "Hot Cell Window Gasket and Seal Degradation" was deleted from the list for the same reasons as the technology need for the WESF hot cell windows was deleted. The science need, RL-DD033-S, entitled "Reaction of Neutrons with Detectors for Building 324" may also be deleted. Sue will talk to Richard Arthur of PNNL to determine whether this is a science need or not.

The science need, RL-DD034-S, entitled "TRU Model for 324 Building Waste" was extensively rewritten with the help of the project managers to focus on what is really needed. There are also three new needs; RL-DD035-S, 036-S, and 037-S; that have been added that deal with the thermodynamic properties of Pu nitrate, a database for thermodynamic properties, and the modeling of thermodynamic properties respectively. These needs should be more directly linked to the nuclear material technology needs that deal with PFP materials. A question was raised as to how these new science needs will be approved by the DOE-AM, and the answer was as an addendum to the needs already approved.

The BHI technology needs were reviewed. Only a few minor changes were made to the needs after project reviews were done. The subgroup recommended that the technology need, RL-DD057, entitled "Long-Lived Roof Replacement for PUREX" be removed from the needs list. An expert could be hired to determine what needs to be done for the roof so this was not a technology need but rather a program need. T-Plant is being examined to see if it could become the decontamination center for Hanford.

ASTD Update

Dave Langstaff gave an update on the ASTD robotic work platform project. A workshop was recently held on the requirements definition for this project. The next step is to develop the requirements themselves. Requests for information have been sent to 44 vendors and responses are starting to arrive. An RFP is scheduled to be out at the end of July. Performance specifications are to be done by the end of June. BWHC is writing the performance specifications for the 324 Building B-Cell now. Money received from EM-50 will be spent on vendor costs through the contract. The robotics work platform is to be deployed from a crane in a high radiation zone. The work to be done includes size reduction, characterization and decontamination at B-Cell first before being deployed elsewhere on Site such as U-Plant. BWHC personnel are also working at NTS on the laser cutting ASTD project. Once the system is operational it will first be used at NTS then at Rocky Flats on glove boxes and finally demonstrated at Hanford. The system uses our laser cutter combined with a material handling system for decontamination work.

ISMS Core Functions

Dave Langstaff presented information on the five core functions of an Integrated Safety Management System (ISMS). This is a new systems approach that is being used across the country. In addition to the five core functions reviewed at this meeting there are also seven guiding principles that Dave will review at the next D&D Subgroup meeting. Dave proceeded to review the core functions as they apply to the work of the D&D Subgroup.

The first core function is scope of work. It is necessary to determine the projects entire scope of work in order to determine the S&T needs. We also need to try to scope the needs statements to include the projects actual needs. The second core function is evaluation of hazards. The project personnel should evaluate hazards associated with their projects to see if any S&T needs arise from the analysis. The needs statements should also identify any hazards, as this would help when designing demonstrations of new technologies. The third core function is implementation of hazard controls. When writing the needs statements try to identify the controls needed also. The fourth core function is perform work. Meeting the S&T needs through the implementation of new technology should result in work being performed faster, cheaper, safer, etc. The fifth core function is evaluate performance and provide feedback. This involves making improvements to the work being done on an ongoing basis also. The S&T needs process is itself an evaluation of the work being done and scheduled to be done.

The next subgroup meeting is scheduled for June 15 at 9am in the EESB Chinook Room. Vendors of decontamination equipment will be contacted to see if they will present information on their products. In addition, the STCG Management Council wants the D&D Subgroup to prepare changes to the scope of the subgroups roles and responsibilities by incorporating the nuclear material needs into our subgroup charter. This will be discussed at the next meeting.

D&D Subgroup Meeting Attendees 05/11/99

Greg Berlin	FDH - TM	372-4352
Dennis A. Brown	DOE/STP	372-4030
Sue Garrett	PNNL	372-4266
Bob Julian	Ecology	736-5702
David Langstaff	DOE-RL/AMF	376-5580
Shannon Saget	DOE-RL/AMT	372-4029
Scott Spencer	BWHC	376-4478
Detlev Wegener	HAMMER	373-2021
Steve Weakley	PNNL	372-4275